Delta Controller ASCII/RTU

HMI Factory Setting:

Baud rate: 9600, 7, None, 2 (ASCII); 9600, 8, None, 2 (RTU)

Controller Station Number: 1

Control Area / Status Area: None/None

Connection

Delta Servo

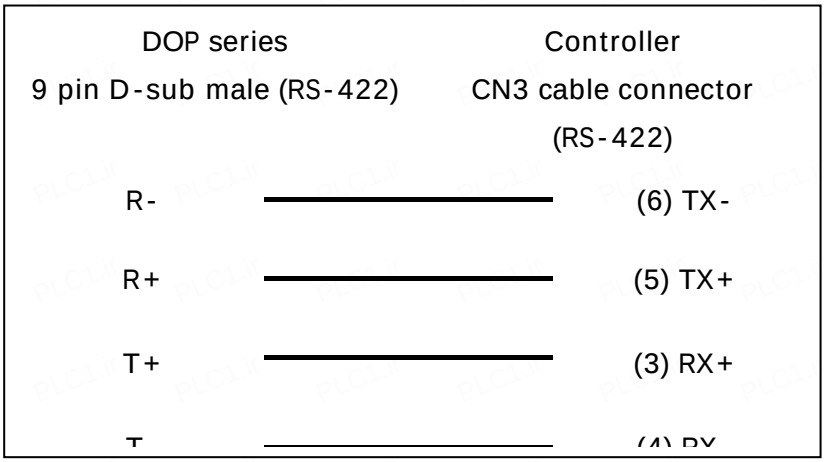
a. RS-232 (DOP-A/AE/AS, DOP-B Series)

DOP series 9 pin D-sub male (RS-232)		Controller CN3 cable connector (RS-232)
RXD (2)	———	(2) TX
TXD (3)	———	(4) RX
GND (5)		(1) GND

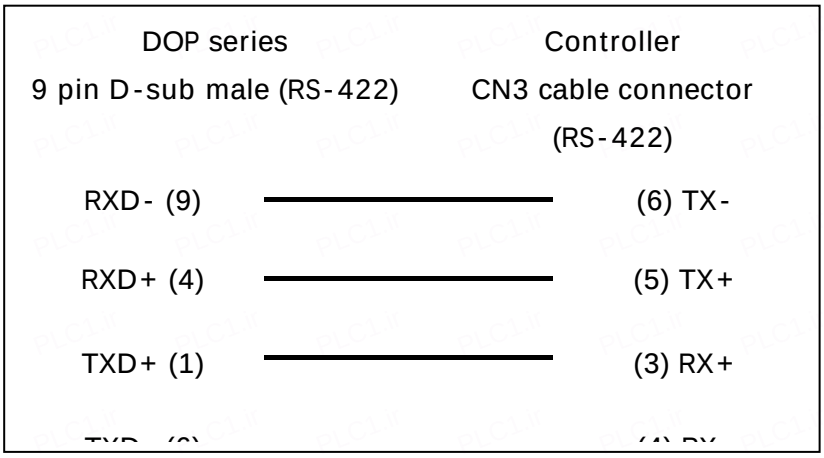
b. RS-422 (DOP-A/AE Series)

DOP series 9 pin D-sub male (RS-422)		Controller CN3 cable connector (RS-422)
RXD- (1)	———	(6) TX-
RXD+ (2)	———	(5) TX+
TXD+ (3)	———	(3) RX+
TXD- (4)		(4) RX-

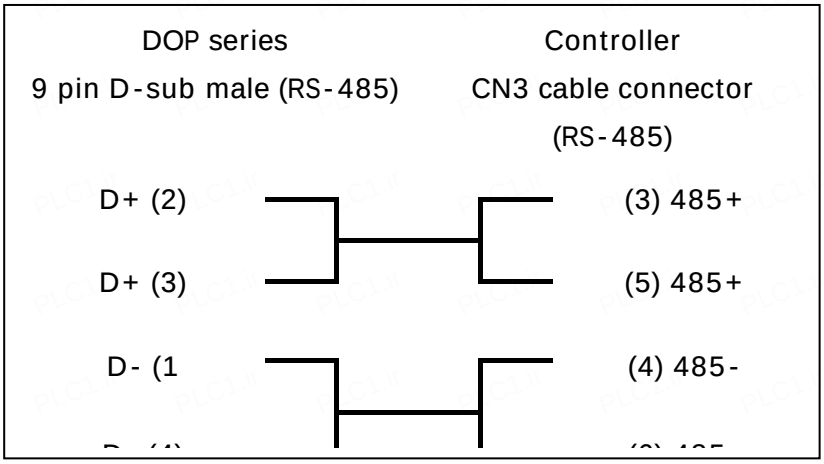
c. RS-422 (DOP-AS35/AS38/AS57 Series)



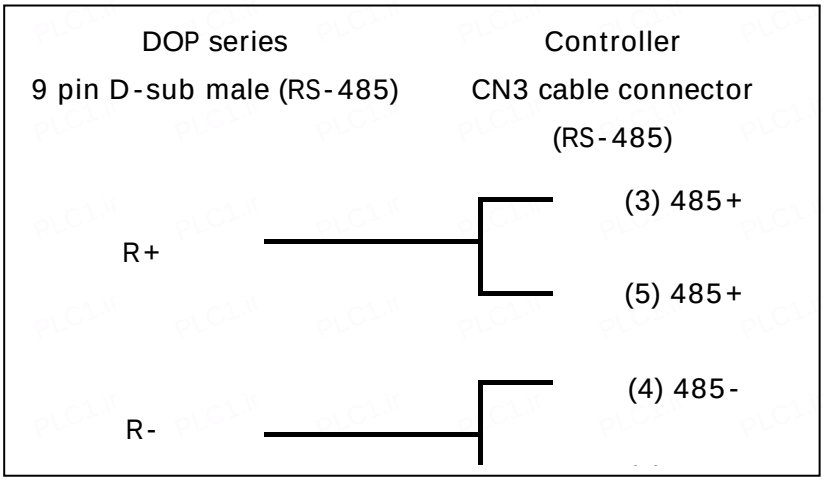
d. RS-422 (DOP-B Series)



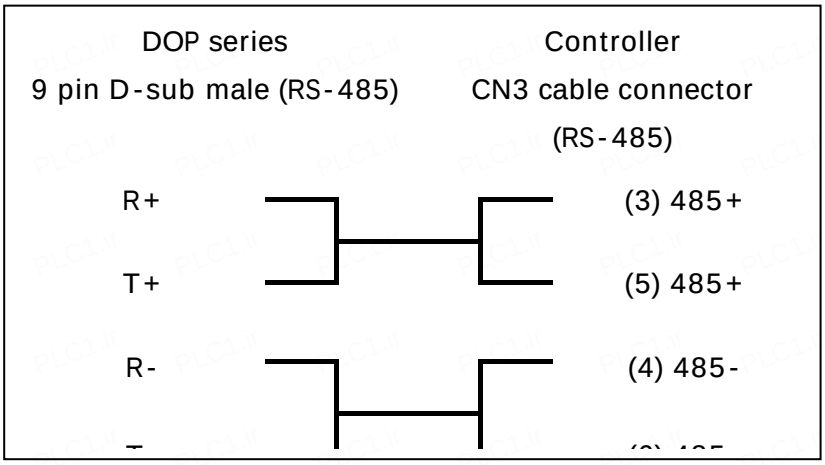
e. RS-485 (DOP-A/AE Series)



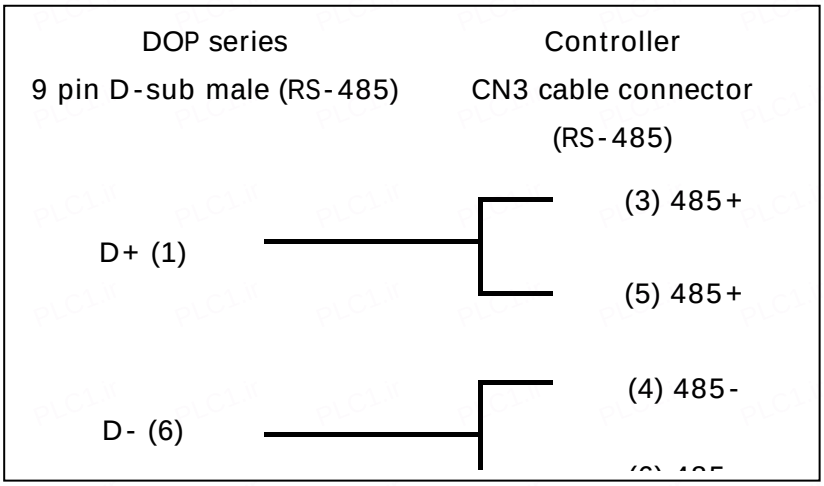
f. RS-485 (DOP-AS57 Series)



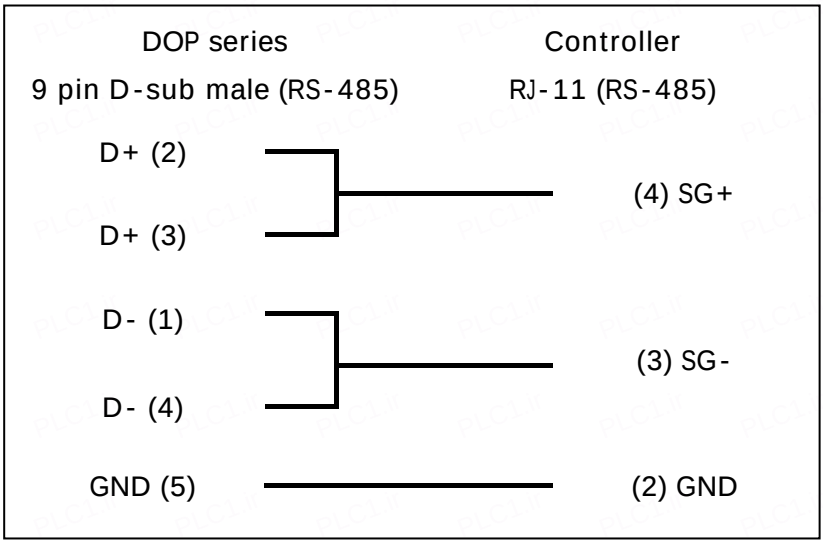
g. RS-485 (DOP-AS35/AS38 Series)



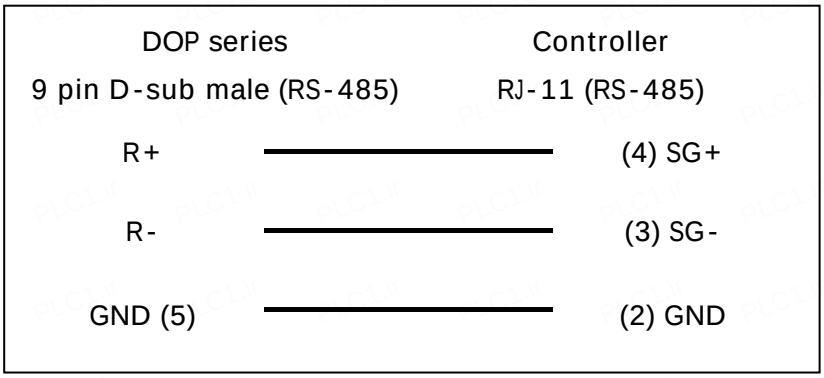
h. RS-485 (DOP-B Series)



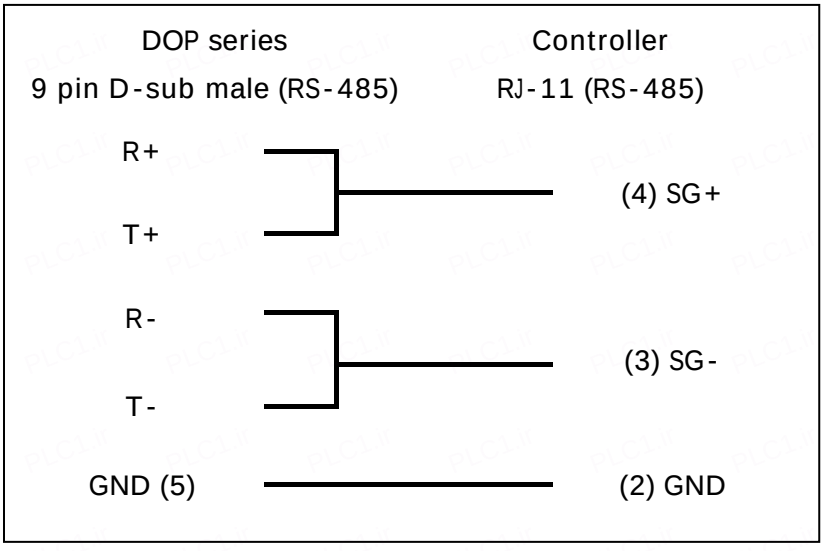
a. RS-485 (DOP-A/AE Series)



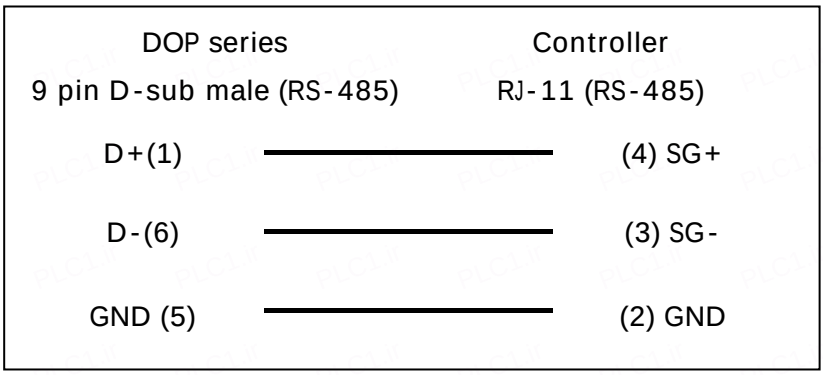
b. RS-485 (DOP-AS57 Series)



c. RS-485 (DOP-AS35/AS38 Series)

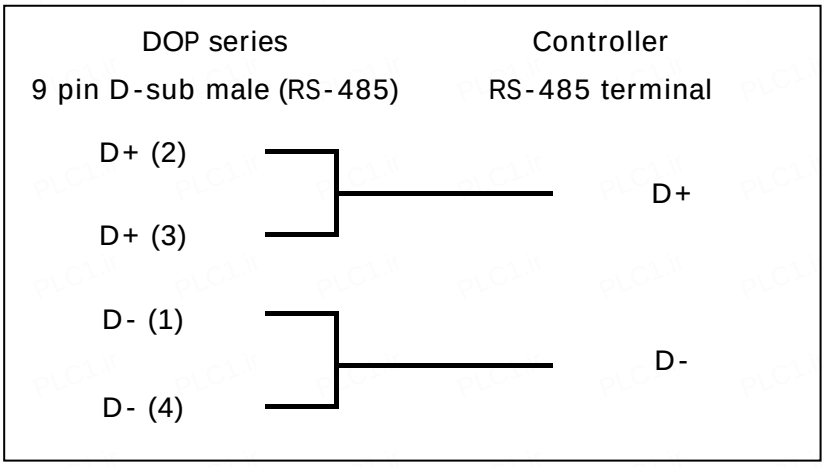


d. RS-485 (DOP-B Series)

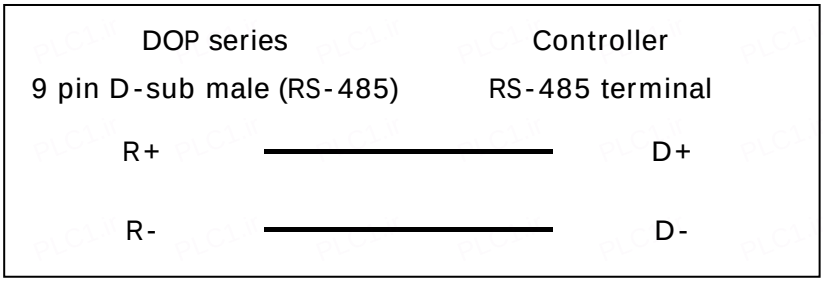


Temperature Controller

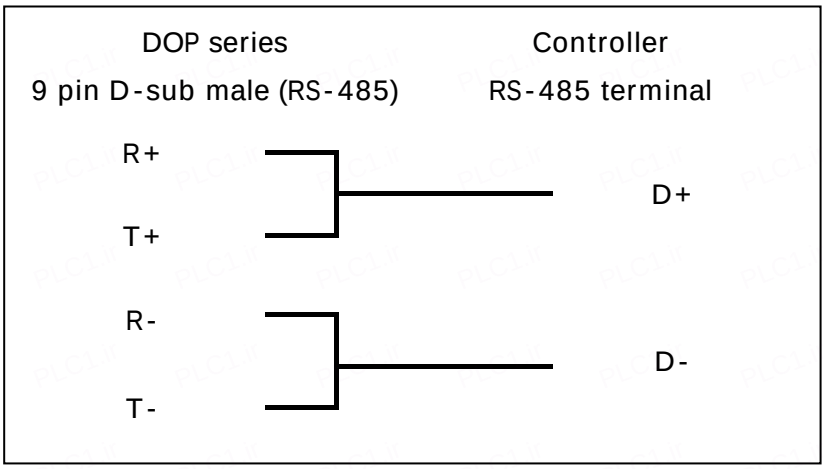
a. RS-485 (DOP-A/AE Series)



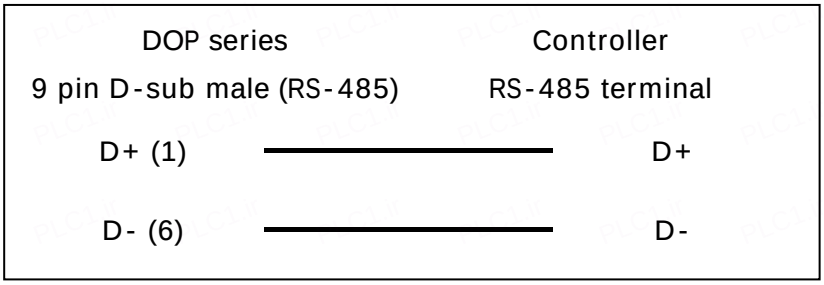
b. RS-485 (DOP-AS57 Series)



c. RS-485 (DOP-AS35/AS38 Series)



d. RS-485 (DOP-B Series)



Definition of PLC Read/Write Address

a. Registers

Type	Format Word No. (n)	Read/Write Range	Data Length	Note
Servo Communication Address	**SERVO-**n	**SERVO-**0 – **SERVO-**FFFF	Word	Hexadecimal
AC Drive Communication Address	**INVERTER-**n	**INVERTER-**0 – **INVERTER-**FFFF	Word	Hexadecimal
Temperature Controller Communication Address	**TEMP_CTRL-**n	**TEMP_CTRL-**0 – **TEMP_CTRL-**6000	Word	Hexadecimal
PLC Communication Address X	**PLC_X**n	**PLC_X**0 – **PLC_X**360	Word	Octal, 1
PLC Communication Address Y	**PLC_Y**n	**PLC_Y**0 – **PLC_Y**360	Word	Octal, 1
PLC Communication Address M	**PLC_M**n	**PLC_M**0 – **PLC_M**1520, **PLC_M**1536 – **PLC_M**4080	Word	1
PLC Communication Address S	**PLC_S**n	**PLC_S**0 – **PLC_S**1008	Word	1
PLC Communication Address T	**PLC_T**n	**PLC_T**0 – **PLC_T**255	Word	

Type	Format Word No. (n)	Read/Write Range	Data Length	Note
PLC Communication Address C	**PLC_C**n	**PLC_C**0 – **PLC_C**199	Word	
PLC Communication Address D	**PLC_D**n	**PLC_D**0 – **PLC_D**11999	Word	
PLC Communication Address HC	**PLC_HC**n	**PLC_HC**200 –**PLC_HC**255	Double Word	
PLC Communication Address Module	**PLC_Module**n	**PLC_Module**4000 – **PLC_Module**4499	Word	Hexadecimal
Output Registers	**RW-**n	**RW-**0 – **RW-**FFFF	Word	Hexadecimal
Input Registers	**R-**n	**R-**0 – **R-**FFFF	Word	Hexadecimal
Output Registers	**W**n	**W**40001 – **W**50000	Word	
Input Registers	**W**n	**W**30001 – **W**40000	Word	

b. Contacts

Type	Format Word No.(n) Bit No. (b)	Read/Write Range	Note
Servo Communication Address	**SERVO-**n.b	**SERVO-**0.0 – **SERVO-**FFFF.F	Hexadecimal
AC Drive Communication Address	**INVERTER-**n.b	**INVERTER-**0.0 – **INVERTER-**FFFF.F	Hexadecimal
Temperature Controller Communication Address	**TEMP_CTRL-**n.b	**TEMP_CTRL-**0.0 – **TEMP_CTRL-**6000.F	Hexadecimal
Servo Digital Input	**SERVO_DI-**b	**SERVO_DI-**1 – **SERVO_DI-**8	2
Servo Digital Output	**SERVO_DO-**b	**SERVO_DO-**1 – **SERVO_DO-**5	2
PLC Communication Address X	**PLC_X**b	**PLC_X**0 – **PLC_X**377	Octal
PLC Communication Address Y	**PLC_Y**b	**PLC_Y**0 – **PLC_Y**377	Octal
PLC Communication Address M	**PLC_M**b	**PLC_M**0 – **PLC_M1**535, **PLC_M**1536 – **PLC_M**4095	
PLC Communication Address S	**PLC_S**b	**PLC_S**0 – **PLC_S1**023	
PLC Communication Address T	**PLC_T**b	**PLC_T**0 – **PLC_T**255	
PLC Communication Address C	**PLC_C**b	**PLC_C**0 – **PLC_C**255	

PLC Communication Address D	**PLC_D**n.b	**PLC_D**0.0 – **PLC_D**11999.15	
Temperature Controller Bit Communication Address	**TEMP_CTRLB-**b	**TEMP_CTRLB-**800 – **TEMP_CTRLB-**8FF	Hexadecimal
Discrete Outputs	**RWB-**b	**RWB-**0 – **RWB-**FFFF	Hexadecimal
Discrete Inputs	**RB-**b	**RB-**0 – **RB-**FFFF	Hexadecimal
Discrete Outputs	**B**b	**B**1 – **B**10000	
Discrete Inputs	**B**b	**B**10001 – **B**20000	

NOTE

1) Device address must be the multiple of 16.
2) SERVO_DI-, SERVO_DO- are only for A, B, AB and A+ series Servo。
3) HMI can be connected to several temperature controllers using RTU transmission mode. However a communication delay time of 5ms or longer is highly recommended.